

M17 AGAR

Medium for selective enumeration of *Streptococcus thermophilus* and for the improved growth of lactic streptococci and their bacteriophages.

TYPICAL FORMULA	(g/l)
Tryptone	2.5
Soytone	5.0
Meat Extract	5.0
Lactose	5.0
Peptone	2.5
Ascorbic Acid	0.5
Yeast Extract	2.5
Magnesium Sulfate	0.25
Disodium- β -glycerophosphate	19.0
Agar	15.0

Final pH = 7.2 \pm 0.2 at 25 °C.

DIRECTIONS

Suspend 57.3 g of powder in 1 liter of distilled or deionized water. Heat to boiling until completely dissolved. Distribute in the appropriate containers. Autoclave at 121 °C for 15 minutes.

DESCRIPTION

M17 AGAR is used for cultivation and maintenance of streptococci and their bacteriophages. Also used for the cultivation and maintenance of starter cultures for cheese and yogurt manufacture as well as detecting streptococcal mutants that are unable to ferment lactose.

TECHNIQUE

Inoculate plates of M17 Agar with a loopful from each dilution of the specimen or of the homogenized sample of yogurt or cheese. Otherwise add 1 ml aliquots of the dilution into an empty Petri dish and prepare pour plates with 14 ml of sterile molten M17 Agar cooled at 45-50 °C. Incubate for 18-48 hours at 36 \pm 1 °C.

Streptococcus thermophilus colonies are visible after 18-24 hours incubation and after 48 hours form colonies of 1-2 mm diameter. *Lactobacillus bulgaricus* do not grow or produces very restricted colonies.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige to medium tan.

Prepared medium

Appearance: slightly opalescent without significant precipitate.

Color: light to medium amber.

Incubation conditions: 36 \pm 1 °C for 18-48 hours.

Microorganism	ATCC	Growth
<i>Lactobacillus bulgaricus</i>	11842	none to poor
<i>Streptococcus thermophilus</i>	14485	good

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.

Store prepared plates at 2-8 °C.

REFERENCES

1. International Dairy Federation. 1981. Joint IDF/ISO/AOAC Group E44.
2. Terzaghi, B.E., and W.E. Sandine. 1975. Appl. Microbiol. **29**: 807-813.



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PRESENTATION









Product	REF	
M17 AGAR (8.7 l)	610192	500 g
M17 AGAR (1.7 l)	620192	100 g

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	 Keep away from heat source
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	



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